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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/491,953	01/26/2000	Pascal Mellot	98GR31554159	9281
27975	7590	12/17/2003	EXAMINER	
ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST P.A. 1401 CITRUS CENTER 255 SOUTH ORANGE AVENUE P.O. BOX 3791 ORLANDO, FL 32802-3791			SHINGLETON, MICHAEL B	
		ART UNIT		PAPER NUMBER
		2817		

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.	09-491,952	Applicant(s)	Mellot
Examiner	S H I N G L E T O N	Group Art Unit	2817

**—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE Three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

Responsive to communication(s) filed on 1-26-2000

This action is FINAL.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 1 1; 453 O.G. 213.

### Disposition of Claims

Claim(s) 8-20 is/are pending in the application.

Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

Claim(s) 16 is/are allowed.

Claim(s) 5, 7-9, 11-13, 17, 18, 20 is/are rejected.

Claim(s) 6, 10, 14, 19 is/are objected to.

Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

### Application Papers

The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.

The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119 (a)-(d)

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

All  Some\*  None of the:

Certified copies of the priority documents have been received.

Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

Copies of the certified copies of the priority documents have been received  
in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

### Attachment(s)

Information Disclosure Statement(s), PTO-1449, Paper No(s). 5  Interview Summary, PTO-413

Notice of Reference(s) Cited, PTO-892  Notice of Informal Patent Application, PTO-152

Notice of Draftsperson's Patent Drawing Review, PTO-948  Other \_\_\_\_\_

## Office Action Summary

#### DETAILED ACTION

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 7-9, 11-13, 17, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art as represented by Figure 1 (AAPA) in view of Hayt Jr..

AAPA discloses everything recited by the claims including the differential amplifier, a microphone 25 and the bias resistor 10. AAPA fails to mention the use of a signal resistor that is connected between the first and second inputs i.e. a resistor connected in parallel with the bias resistor. AAPA is silent of the use of impedance matching at the reference input of the device.

Hayt teaches that a single resistor can be replaced with a parallel combination of resistances. See Figure 2-17. Such structures are art recognized equivalents. Providing impedance matching is conventional so as to reduce reflections.

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the single resistor with a parallel combination of resistors given the art recognized equivalents thereby forming a "signal resistor" that current passes wherein the variations of the current corresponding to the signal to be amplified and a bias resistor as meant by the claims. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an impedance

mathcin stage at the reference input so as to reduce reflections of the input signal back into the amplifier as is conventionally known in the art.

Claims 6, 10, 14 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 16 is allowable over the art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael B. Shingleton whose telephone number is 703-308-4903. The examiner can normally be reached on Mon-Thurs from 8:30 to 4:30. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal, can be reached on (703) 308-4909 after 1-13-2004 (571)272-1770. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

MBS  
December 9, 2003